

# Document 0020

CALIFORNIA ENERGY COMMISSION  
1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

GRAY DAVIS, Governor



July 2, 2004



Mrs. Ellen Russell  
Office of Fossil Energy (FE-27)  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585-0350

Re: Comments on Draft Environmental Impact Statement for the Imperial-Mexicali 230-kV Transmission Lines (DOE/EIS-0365)

Dear Mrs. Russell:

The California Energy Commission staff has reviewed the Draft Environmental Impact Statement for the Imperial-Mexicali 230-kV Transmission Lines and offers the following comments for your consideration. The comments focus on (1) impacts from emissions of volatile organic compounds (VOCs) and (2) Best Available Control Technology (BACT).

## Impacts from Emissions of Volatile Organic Compounds

The Draft Environmental Impact Statement (DEIS) identifies VOCs, in addition to oxides of nitrogen (NO<sub>x</sub>), as an ozone (O<sub>3</sub>) precursor (p. 4-47). It presents ozone and nitrogen dioxide (NO<sub>2</sub>) data from three air monitoring sites in Imperial County and Mexicali (pp. 4-47, 48) and concludes that, since high ozone levels mainly occur at lower NO<sub>2</sub> levels at these sites, the condition exists such that introducing more NO<sub>2</sub> reduces ozone (p. 4-47). Based on this observation, the DEIS concludes that the Imperial County-Mexicali area within the Salton Sea Air Basin represents an urban-like region where ozone formation is VOC-limited, not NO<sub>2</sub> limited (p. 4-47). In addition, the proposed action lies within the ozone nonattainment area in Imperial County (p. 4-38).

The section on ozone modeling (p. 4-50 et seq.) investigates the impact of plant operation on incremental ozone formation in the VOC-limited area by discussing changes due to NO<sub>x</sub> emissions from the projects. No meaningful increase or decrease in ozone levels was found. However, as noted above, the DEIS determined the area to be VOC-limited, not NO<sub>x</sub> limited. The only mention of VOCs consists of an estimate in Table G-1 of VOC emissions for the Termoelectrica de Mexicali Power Plant (TDM), with no related discussion of potential impacts. Although section 4.3.2.2.4 states that "VOC emissions for the turbines at the TDM facility and the La Rosita Power Complex (LRPC) were estimated using an EPA AP-42 natural gas combustion emission factor" and "These data were drawn upon in the analysis and discussion of O<sub>3</sub> formation in Section 4.3.4.4.2" (p. 4-31), it is unclear to staff how, or even if, VOC data were used in that analysis. Staff suggests that a meaningful analysis of the impacts of project operation on ozone formation in the area would need to include an explicit discussion of project VOC emissions in the VOC-limited, ozone nonattainment area and a discussion of potential mitigation measures as appropriate.

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## Best Available Control Technology

The DEIS should note that BACT for NO<sub>2</sub> and VOC would likely be required if the TDM and LRPC generation projects were located in Imperial County. Whether or not BACT would be required for any proposed project is determined by the air district that has jurisdiction over the project according to its applicable rules. Similarly, the district also specifies the BACT levels that would be required.

Imperial County Air Pollution Control District (District) Rule 207 C.1.a specifies that an applicant shall apply BACT to any new Emissions Unit which has a Potential to Emit 25 pounds per day or more, (or approximately 5 tons annually, assuming continuous operation) of any nonattainment pollutant or its precursors. Additionally, District Rule 101 lists hydrocarbons and nitrogen oxides as ozone precursors; and, hydrocarbons, nitrogen oxides and sulfur oxides as precursors to PM<sub>10</sub>.

EIS Table 4.3-1a shows that emissions of PM<sub>10</sub> and NO<sub>2</sub> would far exceed the 5 ton BACT threshold. EIS Table G-1 shows that VOC emissions would also substantially exceed the threshold.

The Salton Sea Air Basin is classified by the state as a nonattainment area for PM<sub>2.5</sub> and PM<sub>10</sub> and is federally classified by the EPA as a moderate nonattainment area for PM<sub>10</sub>. As the DEIS notes, the U.S. Circuit Court of Appeals has mandated that the EPA reclassify Imperial Valley from a moderate to a serious nonattainment area for PM<sub>10</sub> (p. 3-53). The air basin is classified as a transitional nonattainment area for ozone per the National Ambient Air Quality Standards, and a moderate nonattainment area for ozone per the California Ambient Air Quality Standards. Thus, it is likely that the district would have required BACT for NO<sub>2</sub> and VOC as PM<sub>10</sub> and ozone precursors, were the TDM and LRPC projects located in Imperial County.

Because it is the district's responsibility to set BACT levels as noted above, Energy Commission staff cannot definitively identify the BACT levels that might have applied to the projects. However, Table 1 below compares project emissions to BACT levels recommended by EPA and/or the California Air Resources Board.

**Table 1**  
**Project Emissions vs. Recommended Combined Cycle BACT Levels**  
**(parts per million)**

EMISSION	LRPC	TDM	Recommended BACT
NO <sub>x</sub>	4	2.5	2.0 <sup>a</sup>
CO	30	4	4 <sup>a</sup>
VOC	not specified	not specified	2 <sup>b</sup>

<sup>a</sup> Letter from Gerardo Rios, Chief, EPA Region IX Permits Office, to Pang Mueller, Senior Manager, South Coast Air Quality Management District, Re: Inland Empire Energy Center, September 5, 2002.

<sup>b</sup> California Air Resources Board, Guidance for Power Plant Siting and Best Available Control Technology, July 22, 1999, p. 32.

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Imperial-Mexicali  
Transmission Lines  
Project

The DEIS discusses the latest more efficient CO emissions controls and concludes the project will emit fewer CO pollutants. It discusses ambient CO concentrations at Imperial Valley, California, and the CO emissions standards set by the EPA (p. 4-57). However, the DEIS CO emissions model assumes no emissions from VOCs. Since VOCs are also a concern of the Draft Clean Air Act, a commitment for better the EIS should discuss the status of CO pollutants on the LRPC facility and the TDM facility. The project should discuss a regular measure for potential future increases due to climate change.

For more information, please contact Mike Rangelon, staff at (916) 454-4168. Please visit the Department of Energy's website on the Draft Environmental Impact Statement for the Imperial-Mexicali 230 kV Transmission Lines.

Imperial-Mexicali

Mr. Robert GRIFFIN, Deputy Director  
Environmental Assessment & Facilities Safety Division

## Document 0021



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

July 29, 2004

Ms. Ellen Russell  
Office of Electric Power Regulation  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

Re: Draft Environmental Impact Statement (DEIS) for the Imperial-Mexicali 230 kV Transmission Lines (CEQ#040222)

Dear Ms. Russell:

The Environmental Protection Agency (EPA) has reviewed the above referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Our detailed comments are enclosed.

EPA has previously been involved in the evaluation of environmental impacts from the Imperial-Mexicali transmission lines and the related construction and operation of the Termoelectrica de Mexicali (TDM) and the La Rosita Power Complex (LRPC) power plants in Mexicali, Mexico. In October, 2001, we provided written comments on the Environmental Assessment that the Department of Energy (DOE) and the Bureau of Land Management (BLM), as a cooperating agency, previously prepared to evaluate the impacts of the proposed project; participated in inter-agency conference calls to discuss the relationship of the transmission lines with other related projects, including the TDM and LRPC power plants in Mexicali and a cross-border natural gas pipeline which will provide fuel for the power plants; and met with representatives of InterGen and Sempra, sponsors of the transmission lines and TDM and LRPC plants. In our letter and discussions with the agencies and project sponsors, we raised concerns regarding the potential impacts to air and water quality, and the need for a comprehensive analysis of environmental impacts from the related Mexicali power plants and cross-border natural gas pipeline.

We have reviewed the DEIS for the Imperial-Mexicali Transmission Lines project, and are pleased that many of the concerns we raised on the Environmental Assessment have been addressed in this document. The analysis of impacts is comprehensive, and the DEIS provides a clear discussion of the project and its relationship to the Mexicali power plants and the cross-border natural gas pipeline. We are particularly pleased that the preferred alternative includes a commitment that dry low-nitrogen oxide burners and selective catalytic reduction systems will be added to all of the turbines at the La Rosita Power Complex by 2005, and encourage DOE to include this commitment in the Record of Decision for the project.

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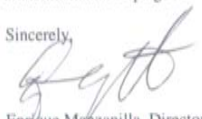
While we are pleased with the addition of air pollutant reduction technology at the LRPC and TDM facilities, EPA continues to be concerned about the project's contribution to air quality impacts in the Imperial Valley-Mexicali region. As the DEIS indicates, there are substantial limitations in modeling ozone impacts, and it is difficult to conclude with certainty whether emissions from the TDM and LRPC plants will worsen air quality in Imperial County, which is an ozone non-attainment area. The document analyzes an alternative that includes mitigation measures, such as off-site emission reductions, as a means of ensuring that air quality would not be worsened by the project or the related power plants. Power plant facilities permitted in the U.S., such as the 510-megawatt Otay Mesa facility in San Diego County, California, are required to obtain emission offsets to address the uncertainty related to modeling projected emissions, and to ensure that there would not be a net increase of air pollution in an air basin. We recommend that off-site mitigation measures to reduce basin-wide emissions be incorporated as part of the preferred alternative.

In addition, EPA is concerned about the cumulative impacts to the New River and Salton Sea, especially in light of other planned projects such as the Mexicali II Wastewater Treatment Plant and the multi-agency Quantification Settlement Agreement for water use in the basin. The DEIS provides a thorough analysis of the impacts to water supply and quality in the New River and Salton Sea, and discusses the environmental trade-offs between reducing water supply and potentially improving water quality. EPA recognizes the difficulty in balancing these trade-offs, but we are concerned that the water quality benefits from reducing some pollutants might be outweighed by increased concentrations of other pollutants. Specifically, decreased flows into the New River will result in increased concentrations of total dissolved solids (salinity) and selenium, which play a significant role in the degraded water quality of the the New River and Salton Sea. We encourage DOE to work with the Colorado River Basin Regional Water Quality Control Board to identify the appropriate balance in these complex trade-offs, and identify any feasible mitigation measures which could be included in the preferred alternative to reduce cumulative water quality impacts.

Based on our concerns regarding air and water quality impacts, EPA has rated the preferred alternative as Environmental Concerns - Insufficient Information (EC-2). Please refer to the attached "Summary of Rating Definitions" for further details on EPA's rating system.

We appreciate the opportunity to provide comments on this DEIS. When the Final EIS is released for public review, please send two copies to the address above (mail code: CMD-2). If you have any questions, please contact me or Shanna Draheim, the lead reviewer for this project. Shanna can be reached at (415) 972-3851 or draheim.shanna@epa.gov.

Sincerely,



Enrique Manzanilla, Director  
Cross Media Division

Enclosures: EPA Summary Rating Sheet  
Detailed comments

0021-1

cc: Duane Marti, Bureau of Land Management, El Centro Field Office  
Stephen Birdsall, Imperial County Air Pollution Control District  
Sylvia Oey, California Air Resources Board  
Gary Johnson, Colorado River Basin Regional Water Quality Control Board

0021-2



EPA DETAILED COMMENTS ON THE IMPERIAL-MEXICALI 230-KV TRANSMISSION LINES  
DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS), JULY 30, 2004

## Air Quality Impacts in Imperial County

The proposed Imperial-Mexicali Transmission lines will connect two new power plants, the Termoelectrica de Mexicali (TDM) and the La Rosita Power Complex (LRPC), to the California electricity grid. The preferred alternative evaluated in the DEIS includes air pollutant emission controls on all units of the TDM and LRPC facilities by 2005. In addition, the DEIS evaluates a Mitigation Measures Alternative which would provide for off-site mitigation measures to minimize environmental impacts in the United States.

The DEIS analyzed the potential impacts to air quality in the Mexicali and Imperial Valley region from the construction and operation of the transmission lines and the TDM and LRPC facilities. Imperial County is in the Salton Sea Air Basin, and is classified as non-attainment for 1- and 8-hour ozone and particulate matter less than 10 microns (PM<sub>10</sub>) standards. Regarding the new PM<sub>2.5</sub> standard, the state initially recommended that part of Imperial County be designated non-attainment for the PM<sub>2.5</sub> standard. Based on the most recent ambient air monitoring data, EPA stated in a June 29, 2004 letter to the State that, "the most recent air quality monitoring data indicate that Imperial County meets the fine-particulate standard." While our response to the state's initial recommendation expresses our intent, it does not constitute an official designation. EPA expects to make that official determination by the end of 2004. In any event, Imperial County experiences PM<sub>2.5</sub> levels that are very close to exceeding the federal standard.

*Carbon monoxide (CO), PM<sub>10</sub> and nitrogen oxides (NO<sub>x</sub>):* The air quality impacts from the TDM and LRPC units were estimated using the AMS/EPA Regulatory Model (AERMOD), surface meteorological data from the Imperial Airport, and upper air data from Miramar station in San Diego, California. The results, presented in Table 4.3-6, indicate that the increase in criteria pollutants at the maximum receptor point in the United States from the TDM and LRPC units are below the significance levels for CO, PM<sub>10</sub> and nitrogen dioxide (NO<sub>2</sub>). The impact of secondary formation of PM<sub>10</sub> from plant emissions of ammonia was also evaluated, and was determined using a conservative production term for ammonium nitrate (NH<sub>4</sub>NO<sub>3</sub>) based on a study using winter conditions in San Joaquin Valley. The increase of 24-hour PM<sub>10</sub> (from emissions of ammonium nitrate) was calculated to be approximately 1 to 2 percent of total PM<sub>10</sub>, a very small amount. EPA believes that the analysis correctly shows that the project impact levels will be below significance levels for CO, PM<sub>10</sub> (primary and secondary), and NO<sub>x</sub>.

*Ozone:* As the DEIS acknowledges, it is difficult to quantify the impact of a small number of facilities (i.e., the TDM and LRPC units) on the maximum ozone concentration in an airshed. In the Imperial County/Mexicali area, the absence of area-specific information on mixing height, temperature, relative humidity, and levels of volatile organic compounds (an ozone precursor) makes the modeling of ozone formation particularly difficult. The analysis of ozone formation presented in the DEIS instead relies on ambient air monitoring data analysis and

**"EO" (Environmental Objections)**

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

*"EU" (Environmentally Unsatisfactory)*

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CBO.

## Category 1\* (Adequate)

*Category I\* (Adequate)*  
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

*"Category 2" (Insufficient Information)*  
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

*Category 3) (Inadequate)* EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or that the EIS reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the draft EIS contains information, data, analyses, or discussions that are of such a magnitude that they should have full public review and comment. At this stage, EPA does not believe that the draft EIS is adequate for the purposes of the NIEPA and/or Section 309 review, and that the EIS should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CFO.

<sup>4</sup>From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

the EPA Ozone Isopleth Plotting Package Research (OZIPR) model to determine the potential influence of NO<sub>2</sub> emissions (the primary pollutant emitted) from the TDM and LRPC facilities on ozone concentrations in Imperial Valley. For the ambient air data analysis, hourly ozone and NO<sub>2</sub> data from three air monitoring sites were presented. The results of this analysis indicate that higher ozone levels primarily occur with lower NO<sub>2</sub> levels. The document concludes that increased NO<sub>x</sub> emissions from the TDM and LRPC plants could produce a decrease in ambient ozone concentrations. However, peak ozone concentrations generally occur in areas away from sources of high NO<sub>x</sub> emissions, not at the monitor where high NO<sub>2</sub> concentrations are measured. As such, the conclusion that ozone impacts will not be significant should be carefully interpreted.

*Recommendations:*

The limitations and uncertainties of the modeling analysis should be clearly disclosed in the Final EIS. Given these limitations, the document's conclusions regarding impacts to air quality should be qualified to indicate that if modeled ozone projections are not correct, impacts to air quality from TDM and LRPC emissions could be significant.

Mitigation of Air Quality Impacts

Because of the limitations of the ozone modeling and impact analysis, the magnitude of ozone precursor emissions (i.e., NO<sub>2</sub>), and the proximity of the TDM and LRPC facilities to Imperial County, it is difficult to conclude with certainty that the ozone impacts from this project will be insignificant. Furthermore, the TDM and LRPC facilities are not required to seek emissions offsets as they would if they were located in the U.S. In order to ensure that there will not be increased concentrations of ozone precursor pollutants in the air basin from the TDM and LRPC facilities, mitigation projects to reduce basin-wide pollutant emissions could be implemented.

*Recommendations:*

The list of mitigation measures in Section 2.4 of the DEIS provides an excellent starting point for potential mitigation projects. EPA recommends that DOE and the project sponsors continue to collaborate with the Imperial County Air Pollution Control District and the Border Power Plant Working Group to prioritize which measures would be most effective in reducing air quality impacts from the related TDM and LRPC plants. The Final EIS should address how these mitigation measures could be implemented, and evaluate the related effects on air quality. EPA recommends DOE include mitigation commitments, as appropriate, in the Record of Decision.

Water Quality Impacts

EPA is concerned about the potential cumulative impacts to the New River and Salton Sea from the use of treated wastewater for cooling the TDM and LRPC facilities. Under the

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Clean Water Act (CWA) Section 303, the New River is listed as impaired for total suspended solids (TSS), pesticides, bacteria, nutrients, and volatile organic compounds. Salton Sea is listed as impaired for salinity, nutrients, and selenium. Use of treated wastewater will improve water quality in the New River and Salton Sea by decreasing the concentrations of phosphorus, chemical oxygen demand, biological oxygen demand, TSS, and pathogens. However, the associated reduction in water flows will also result in increased concentrations of total dissolved solids (salinity) and selenium, both of which contribute to degraded water quality.

*Recommendation:* DOE should work with the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB) to address the trade-offs between reduced flows and water quality improvements, and identify any feasible mitigation measures which could be included in the preferred alternative to reduce cumulative water quality impacts. The Final EIS should describe the coordination process with the CRBRWQCB.

In addition, we request further information or clarification on the following water resource issues in the Final EIS:

- In the next few years, several neighborhoods in Mexicali plan to begin connecting to the municipal sewer system. The EIS should discuss the potential cumulative impacts to water quality and supply in the New River and Salton Sea from increased effluent levels from the Zaragoza Oxidation Lagoons wastewater treatment facility as new neighborhoods are connected to the sewer system.
- Table 5.3-1 and Section 5.3-2 should be changed to reflect that the Mexicali II Wastewater Treatment Project is now underway (not proposed). EPA accepted the project for Border Environmental Infrastructure Fund (BEIF) assistance, and the subagreement between the North American Development Bank and the local utility for disbursement of EPA BEIF funds was signed on June 24, 2004.
- The discussion of cumulative impacts for the Quantification Settlement Agreement (QSA) (Sec. 5.3.1), and the Mexicali II Wastewater Treatment Plant (5.3.2) is inconsistent with regard to salinity changes and changes in inflow to the Salton Sea. For example, Section 5.3.1 indicates that the QSA, in combination with other reasonably foreseeable projects such as the Mexicali II wastewater treatment project, will result in the Salton Sea reaching a salinity of 60,000 milligrams/litre (mg/L) of total dissolved solids (TDS) in 2019 and 142,000 mg/L by 2074. However, Section 5.3.2 indicates that the Mexicali II Project will result in the Salton Sea reaching a salinity of 60,000 mg/L a year earlier in 2018 (versus 2019 projected cumulatively for the QSA), and an equilibrium of 150,741 mg/L TDS in the year 2074 (versus 142,000 mg/L by 2074 projected cumulatively for the QSA).

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## Document 0022

Ms. Ellen Russell

Dear Ms. Russell,

I am very concerned about U.S. power plant developers taking advantage of less stringent standards in Mexico to profit at the expense of public health and the environment. I ask that the Department of Energy require that Semptra Energy and Intergen mitigate the impacts of their power plants before granting presidential permits, and that DOE condition any permits on mitigation.

Communities along the U.S.-Mexico border suffer from poor air quality and scarcity of clean water. Imperial County, California, has the highest childhood asthma rate in the state. Pulmonary sickness rates are also elevated in Mexicali, a city of 600,000 just south of Imperial County in Mexico. DOE's failure to insist on emission offsets for nitrogen oxide (NOx) and particulate emissions from Intergen's La Rosita Power Complex and Semptra's Termoelectrica de Mexicali threatens the health and well-being of highly stressed communities on both sides of the border.

Intergen failed to install advanced NOx controls on one of its export turbines on start-up in June, 2003. Hundreds of tons of NOx beyond what had been estimated when DOE initially granted Intergen a permit were therefore released. This incident proves that, in addition to adequate mitigation measures, ongoing monitoring, reporting, and enforcement provisions in the presidential permits are vital.

The two power plants divert tremendous amounts of low salinity water from the New River to evaporative cooling towers -- water that would otherwise flow to the Salton Sea National Wildlife Refuge in Imperial County, California. The Salton Sea suffers from increasing salinity that may ultimately jeopardize its status as one of the most important migratory bird habitats in the West. Approximately 3.5 billion gallons per year of water are evaporated by the power plants that would otherwise moderate the Sea's salinity problem and increase flow in the New River, while nearly 1 billion gallons of high salinity wastewater are dumped into the river.

Water diversion accentuates New River and Salton Sea salinity, and reduces the volume of the Sea, exposing more shoreline to wind erosion, resulting in up to 100 tons per year of additional particulate matter. Retrofitting the existing wet cooling systems with parallel wet-dry cooling would greatly reduce consumptive water use at the plants while allowing the plants to generate full power on hot days. The parallel wet-dry option would also restore most of the river's flow to the sea and minimize particulate matter. Processing wastewater to reduce or eliminate salinity prior to discharge into the river would effectively address a pollutant of concern for the river and the sea.

The draft EIS prepared by DOE for these two power plants clearly identifies these and other significant air and water impacts, while at the same time concluding that these impacts do not reach a sufficient level of significance to require mitigation. DOE misapplies U.S. air quality regulations, ignores the Colorado River Basin water quality

ceiling of 4,000 mg/l salinity, and ignores impacts in Mexico when inclusion of these impacts further demonstrates the need for impact mitigation and conditional permitting.

DOE should not place the economic interests of U.S. power developers ahead of the public health of U.S. and Mexican citizens living in the vicinity of these plants, nor ahead of the need to protect the New River, an important source of fresh water for the Salton Sea National Wildlife Refuge. I urge you to craft adequate air and water quality mitigation measures in the final EIS and in any permits based thereon, that effectively address the air and water quality impacts caused by these two power plants.

Sincerely,

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## Document 0023

701 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004-2696  
Telephone 202-508-5100



**EDISON ELECTRIC  
INSTITUTE**

July 30, 2004

Mrs. Ellen Russell  
Office of Fossil Energy (FE-27)  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585  
E-mail: [Ellen.Russell@hq.doe.gov](mailto:Ellen.Russell@hq.doe.gov)

Re: Comments on Imperial-Mexicali 230-kV Transmission Lines Draft Environmental Impact Statement, 69 *Fed. Reg.* 26089, 26817, 29934 (May 11, 14 and 26, 2004)

Dear Mrs. Russell:

The Edison Electric Institute (EEI) is responding to the above-referenced Department of Energy (DOE) notices of the availability of the Imperial-Mexicali 230-kV Transmission Lines Draft Environmental Impact Statement (EIS), DOE/EIS-0365, for public review and comments by July 30, 2004. On May 14, 2004, the Environmental Protection Agency (EPA) also issued a "Notice of Availability" of the Draft EIS on the Internet, as filed by DOE with EPA.


EEI is the association of U.S. investor-owned electric companies, international affiliates and industry associates worldwide. EEI's U.S. members serve more than 90 percent of all customers in the shareholder-owned segment of the industry, generate approximately three-quarters of all electricity in the country, and serve about 70 percent of all ultimate customers in the nation.

In developing this response to the DOE notice, EEI is especially interested in how the draft EIS addresses carbon dioxide (CO<sub>2</sub>) emissions from the power plants in question. This is because EEI has long been a participant in matters related to global climate change and greenhouse gas emissions, including the development and implementation of the Framework Convention on Climate Change (FCCC) and the related activities of the Intergovernmental Panel on Climate Change (IPCC), and because of the ubiquitous and global nature of CO<sub>2</sub> and other greenhouse gases. Thus, EEI provides the enclosed comments focusing on the EIS process and on Chapter 4, "Environmental Consequences," of the draft EIS.

Mrs. Ellen Russell  
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EEI appreciates the opportunity to provide comments. If you have any questions about our comments, please contact me ((202) 508-5617; [bfang@eei.org](mailto:bfang@eei.org)) or Eric Holdsworth, EEI's Director, Climate Programs ((202) 508-5103; [eholdsworth@eei.org](mailto:eholdsworth@eei.org)).

Sincerely,

  
William L. Fang  
Deputy General Counsel and  
Climate Issue Director

WLF:tm  
Enclosure

cc (w/ enc):  
Kyle McSarrow  
Deputy Secretary of Energy

Larisa Dobriansky  
Deputy Assistant Secretary for  
National Energy Policy

Lynda Kastoll  
Bureau of Land Management  
U.S. Department of the Interior

Ken Mittelholtz  
Environmental Protection Specialist  
Office of Federal Activities  
Environmental Protection Agency

James L. Connaughton, Esq.  
Chairman  
Council on Environmental Quality

Dr. Harlan L. Watson  
Senior Climate Negotiator and  
Special Representative  
U.S. Department of State



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environmental impact from the proposed actions, the Court finds that it is not appropriate to constrain the agencies' decision-making by ordering an EIS [environmental impact statement] on remand." Order at 11. Nevertheless, by notice of October 30, 2003, DOE and BLM decided to prepare an environmental impact statement (EIS), stating that such a process would "increase opportunities for public and stakeholder participation in the environmental review" and address any environmental impacts "as if the transmission lines did not exist." 68 Fed. Reg. 61798.

In its May 12, 2004, "Memorandum of Points and Authorities in Support of Federal Defendants' Unopposed Motion for the Court to Continue to Defer the Setting Aside of Presidential Permits," the federal government advised the court that DOE/BLM had prepared the draft EIS, that it was available for public comment, that the plaintiffs requested an extension of the public comment period on the draft EIS to July 30, 2004, and that normally the NEPA process would be complete by the end of November. The Memorandum also notes that with the comment period extension the EIS process "may" extend "into early 2005." Nevertheless, the government concluded that deferral just until December 2004 of the decision on the permits was appropriate, subject to a second request from federal defendants for additional time should circumstances change as the NEPA process moves forward. The Memorandum indicates that the plaintiffs would "not oppose an extension of up to 60 days beyond December 15, 2004." Consequently, the court issued a new order on May 19, 2004, deferring action on the permits until completion of the EIS process, or December 15, 2004, "whichever is earlier."

Enclosure

**COMMENTS OF THE EDISON ELECTRIC INSTITUTE ON THE  
DEPARTMENT OF ENERGY/BUREAU OF LAND MANAGEMENT  
MAY 2004 IMPERIAL-MEXICALI 230-KV TRANSMISSION LINES  
DRAFT ENVIRONMENTAL IMPACT STATEMENT**

July 30, 2004

I. Environmental Impact Statement Process Comments

On December 5, 2002, pursuant to Executive Order Numbers 10485 and 12038 and relying on an environmental assessment (EA) and finding of no significant impact (FONSI), the Department of Energy (DOE) issued presidential permits to Sempra Environmental Resources and Baja California Power, Inc. for two transmission lines to cross the U.S. international border in California and connect with natural gas-fired electric power plants in Mexico. The notice indicates that the lines were constructed and operational by July 2003. However, the lines are the subject of two court orders, dated May 2 and July 8, 2003, resulting from litigation in *Border Power Plant Working Group et al. v. Department of Energy et al.*, Case No. 02-CV-513-IEG (S.D. Cal.).

Those orders remanded the National Environmental Policy Act (NEPA) review back to DOE and the Bureau of Land Management (BLM), while deferring action on the permits and the FONSI. The federal court ruled in the May 2 order that the EA and FONSI were deficient in various respects, including failure to examine the impact of carbon dioxide (CO<sub>2</sub>) emissions from the generating units. In its July 8 order, the court stated, "Because Plaintiff has not positively demonstrated to the Court the likelihood of a significant

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December 2004



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As noted by the above-referenced Memorandum, when DOE proposed in October 2003 to “skip straight to the more complex and detailed EIS process,” EEI was initially concerned because the DOE proposal to have an EIS address CO<sub>2</sub> emissions from such generating units may be misunderstood by some to imply that such emissions are capable of creating “significant” environmental impacts, which is the criterion for an EIS under NEPA. The explanation for this choice given in the Memorandum – namely, that the decision to “complete a full-blown” EIS, although “not required” by the court’s order, would increase “opportunities for public participation in the NEPA process” and shorten “the steps in the NEPA process,” coupled with a similar explanation in the DOE October 2003 *Federal Register* notice – although important, did not fully allay our concerns.

However, it is obvious from our review of the draft EIS that factors other than CO<sub>2</sub> emissions from an electric generating project or group of such projects were the real basis for preparing this EIS. Absent such factors, an EA would more than likely have sufficed to address the subject of CO<sub>2</sub> emissions from one or more such projects in the global context if that was the only or prime environmental consequence. We consider this issue to be very important, because no one generating project or group of such projects could reasonably create a “significant” impact on global climate, particularly since the sum of greenhouse gases, including CO<sub>2</sub>, emitted from any such projects is minuscule compared with the enormous global atmospheric pool of such gases. As DOE and BLM know, 40 C.F.R. § 1508.27(a) provides that the significance of a federal action must be judged in

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context. In addition, CO<sub>2</sub> emitted from multiple sources worldwide mixes in the global atmosphere and is considered by scientific experts as one of the “well-mixed gases.” Thus, the context for addressing CO<sub>2</sub> impacts from any given project or group of projects is the entire world. Viewed in that context, DOE/BLM must conclude that the CO<sub>2</sub> impacts from such projects are perforce insignificant, as is the case in the draft EIS.

## II. Chapter 4 Comments on CO<sub>2</sub> Emissions

As set forth in the draft EIS, Bája California Power, Inc. (InterGen) and Sempra Energy Resources (Sempra) each applied for presidential permits to construct two 230-kV transmission lines from Mexico across the U.S. border. The InterGen line extends from the La Rosita Power Complex (LRPC) in Mexico across the border and BLM-managed land to a San Diego Gas & Electric substation in California. That complex consists of two natural gas-fired combined-cycle generating units with a total capacity of 1,060 megaWatts (MW). The entire electrical output of one unit is designated only for the U.S. market and can be exported only over this line. Some of the capacity from the other unit is also designated for the U.S. and can be transported over the new line or an existing line. The Sempra line extends from a natural gas-fired power plant in Mexico developed by Termoelectrica de Mexicali (TDM) over BLM land to the same substation. The entire capacity is designated exclusively for export to the U.S. over the new line.

### A. Section 4.3 – Air Quality

Chapter 4 of the draft EIS “discusses” the environmental consequences of the “four alternatives” set forth in Chapter 2, which are the two lines and the TDM and LRPC

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human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.” Since the FCCC is binding on the U.S., we must assume that when using that term, DOE/BLM do so in the context of that definition.

B. Section 4.3.4.4.3 – “Global Climate Change and Carbon Dioxide Emissions”  
This section properly notes that “there is no Federal regulatory guidance on CO<sub>2</sub> emissions.” Indeed, just prior to DOE issuing its October 2003 notice of its intention to prepare an EIS, EPA decided on August 28, 2003, that CO<sub>2</sub> is not an air pollutant for any regulatory purpose under the Clean Air Act (CAA) and that EPA lacks congressional authority to regulate CO<sub>2</sub> emissions. That decision was published on September 8, 2003, 68 *Fed. Reg.* 52922. As recognized by EPA, important to its decision is the 2001 report of the National Research Council titled “Climate Change Science: An Analysis of Some Key Questions.” Since the EPA decision relying on that report is the Executive Branch’s latest review on the record of global climate change science, DOE/BLM should, in addition to noting no federal regulatory guidance, give deference to the EPA decision in considering CO<sub>2</sub> emissions from these projects.

Relying on NEPA-related regulations of the Council on Environmental Quality (CEQ), the above-referenced court opinions were critical of the EA not comparing the alleged environmental impacts of the proposed project with alternatives. 40 C.F.R. § 1502.14. In light of the fact that no energy project will emit a meaningful amount of CO<sub>2</sub> compared

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power plants, no action, alternative technologies, and mitigation measures. Section 4.3 of the chapter “analyzes the impacts” of those alternatives “on air quality in the United States” and states that such “impacts” may result from air emissions produced during construction and maintenance of the lines and from operation of the plants. One of the five “[m]ajor issues pertaining to air quality” listed in the section is the impacts “in the United States” of CO<sub>2</sub> emissions from the TDM and LRPC power plants, which were compared with both the total U.S. emissions from fossil fuel combustion and total global emissions from such combustion.

We are concerned that DOE would list CO<sub>2</sub> emissions as a “major” issue pertaining to air quality. As we already observed, while various energy projects are likely to produce CO<sub>2</sub> emissions in differing amounts annually, their emissions are insignificant in the global context of such emissions and other greenhouse gases. Indeed, the draft EIS states that such emissions from these plants are about “0.023% compared with global emissions” and that the “expected impacts to global climate change would be negligible” (p. 4-55). In fact, an energy project’s CO<sub>2</sub> emissions should remain relatively constant over time once it reaches full output, while global greenhouse gas emissions – particularly from developing countries like China, India, Brazil and Indonesia – continue to rise substantially. Thus, greenhouse gas emissions from energy projects, such as these, are quite insignificant from a global climate change perspective. In this regard, we point out that the definition of “climate change” as used in the Framework Convention on Climate Change (FCCC) “means a change of climate which is attributed directly or indirectly to

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with global emissions, there is no sound basis, despite the court's comments, for saying that any one project or alternative is preferable to another as a result of lower (or no) CO<sub>2</sub> emissions. Accordingly, the draft EIS properly does not conclude that there are meaningful distinctions with the proposed project and alternatives based on CO<sub>2</sub> emissions.

Finally, in certain circumstances the CEQ regulations require that EISs include a cumulative impact analysis. 40.C.F.R. §§ 1508.7 and 1508.8. Because of the very small quantity of CO<sub>2</sub> emissions produced by a particular project, such as the projects which are the subject of this EIS, a cumulative review of energy projects subject to some form of federal approval would not justify a finding of significant impact. The CO<sub>2</sub> emissions of all such projects would still be so small as to fall well below the significance threshold.

## Document 0024

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(cont.)

0023-4

Marshall Magruder  
PO Box 1267  
Tubac, Arizona 85646  
July 30, 2004



Mrs. Ellen Russell  
U.S. Department of Energy  
Office of Fossil Energy (FE-27)  
1000 Independence Avenue, SW  
Washington, DC 20585-0301

Subject: **Comments on the Draft Environmental Impact Statement for the Imperial-Mexicali 230-kV Transmission Lines (DOE/EIS-0365) (FE Docket Nos. PP-245 and PP-245) of May 2004**

References:

- (a) Federal Register, Volume 69, May 26, 2004, (69 FR 29934) (extended deadline)
- (b) Federal Register, Volume 69, May 11, 2004, (69 FR 26089) (DEIS NOI)
- (c) DOE letter of May 5, 2004 (no subject)
- (d) DOE letter of May 27, 2004 (no subject)
- (e) My letter of November 30, 2003, "Inputs to the Environmental Impact Statement Scoping Process for Baja California Power and Semptra Energy Resources (FE Docket Nos. PP-245 and PP-245)"

Enclosure:

- (1) Comments on the Draft Environmental Impact Statement for the Imperial Mexicali 230-kV Transmission lines (DOE/EIS-0365)

Dear Mrs. Russell:

1. Summary. This letter forwards comments on the subject document, as announced in the *Federal Register*, in references (a) and (b), as requested by your reference (c) as extended by your reference (d). The scoping inputs submitted on this project are reference (e).
2. Overall, this is an excellent Draft EIS, easy to read and to find the answer to a question or other important information.

Sincerely,

Marshall Magruder